

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 8752 2/2/2001]

[Docket No. 2000-NE-54-AD; Amendment 39-12098; AD 2000-25-51]

RIN 2120-AA64

**Airworthiness Directives;** Rolls-Royce Deutschland GmbH (Formerly BMW Rolls-Royce GmbH) Model BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 Turbofan Engines

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This document publishes in the **Federal Register** an amendment adopting Airworthiness Directive (AD) 2000-25-51 that was sent previously to all known U.S. owners and operators of Rolls-Royce Deutschland GmbH (formerly BMW Rolls-Royce GmbH) model BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines. This action requires that certain high pressure turbine (HPT) stage 1 disks, part numbers (P/N's) BRH20009, BRH20010, BRH12167, BRH12168, BRH12466, and BRH12467; and stage 2 disks, P/N's BRH19349 and BRH19350, be removed before exceeding the new reduced cyclic limit, and replaced with a serviceable disk. This amendment is prompted by a reduction of the life limit for several high pressure turbine (HPT) stage 1 and stage 2 disks. The actions specified in this AD are intended to prevent an uncontained failure of the HPT stage 1 or stage 2 disk due to exceeded life-cycle limits.

**DATES:** Effective February 20, 2001, to all owners and operators except those to whom it was made immediately effective by emergency AD 2000-25-51, issued on December 4, 2000, which contained the requirements of this amendment.

Comments for inclusion in the Rules Docket must be received on or before April 3, 2001.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-NE-54-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may also be sent via the Internet using the following address: "9-ane-adcomment@faa.gov." Comments sent via the Internet must contain the docket number in the subject line.

**FOR FURTHER INFORMATION CONTACT:** James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7176; fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:**

On December 4, 2000, the Federal Aviation Administration (FAA) issued emergency AD 2000-25-51, applicable to certain Rolls-Royce Deutschland GmbH (RRD) (formerly BMW Rolls-Royce GmbH) BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines. The Luftfahrt-Bundesamt (LBA), which is the airworthiness authority for Germany, recently notified the FAA that an unsafe condition may exist on certain RRD BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines. The LBA advises that it has received a report of a change in the process used to manufacture several HPT stage 1 and stage 2 disks. That change resulted in a condition that has decreased the cyclic life of the disks from the maximum cyclic life published in the

Time Limits Manual. This condition, if not corrected, could result in an uncontained failure of the HPT stage 1 or stage 2 disk due to exceeded life-cycle limits.

The LBA has issued AD 2000-358/2 in order to assure the airworthiness of these RRD engines in Germany.

### **Bilateral Airworthiness Agreement**

These engine models are manufactured in Germany, and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the LBA has kept the FAA informed of the situation described above. The FAA has examined the findings of the LBA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

### **Requirements of this AD**

Since an unsafe condition has been identified that is likely to exist or develop on other RRD BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines of the same type design, this AD requires replacing HPT stage 1 and stage 2 disks, listed by P/N and SN in this AD, before exceeding the new reduced life limits.

### **Immediate Adoption**

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by emergency AD issued on December 4, 2000 to all known U.S. owners and operators of RRD BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines. These conditions still exist, and the AD is hereby published in the **Federal Register** as an amendment to Section 39.13 of part 39 of the Federal Aviation Regulations (14 CFR part 39) to make it effective to all persons.

### **Comments Invited**

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2000-NE-54-AD." The postcard will be date stamped and returned to the commenter.

### **Regulatory Impact**

This rule does not have federalism implications, as defined in Executive Order 13132, because it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, the FAA has not consulted with state authorities prior to publication of this rule.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

**Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "av-info.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2000-25-51 Rolls-Royce Deutschland GmbH:** Amendment 39-12098. Docket 2000-NE-54-AD.

## Applicability

This airworthiness directive (AD) is applicable to certain Rolls-Royce Deutschland GmbH (formerly BMW Rolls-Royce GmbH) model BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines that are listed by serial number in Table 1 and Table 2 of this AD, and that have a high pressure turbine (HPT) stage 1 disk, part number (P/N) BRH20009, BRH20010, BRH12167, BRH12168, BRH12466, or BRH12467 with a SN that is listed in Table 1; or a stage 2 disk, P/N's BRH19349 or BRH19350 with a SN that is listed in Table 2. These engines are installed on but not limited to McDonnell Douglas Corporation 717 airplanes.

**Note 1:** This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

## Compliance

Compliance with this AD is required as indicated, unless already done.

To prevent an uncontained failure of the HPT stage 1 or stage 2 disk due to exceeded life-cycle limits, do the following:

(a) Remove HPT stage 1 disks listed in Table 1 before exceeding the cycles-since-new (CSN) in the "Replace By" column, and replace with serviceable disks.

**Table 1. HPT Stage 1 Disks By Engine SN, Disk P/N, and Disk SN**

Engine Serial Number	Disk P/N	Disk SN	Replace By
13111	BRH12466	312	2600 CSN
13112	BRH12466	308	2600 CSN
13113	BRH12167	130	2600 CSN
13118	BRH12467	330	2600 CSN
13119	BRH12467	319	2600 CSN
13120	BRH12467	331	2600 CSN
13139	BRH12168	154	2600 CSN
13174	BRH20010	380	2600 CSN
13175	BRH20010	381	2600 CSN
13176	BRH20010	378	2600 CSN
13178	BRH20009	221	2600 CSN
13179	BRH20009	211	2600 CSN

Engine Serial Number	Disk P/N	Disk SN	Replace By
13180	BRH20009	228	2600 CSN
13182	BRH20009	204	2600 CSN
13183	BRH20009	205	2600 CSN
13184	BRH20009	230	2600 CSN
13185	BRH20010	377	2600 CSN
13177	BRH20010	376	3600 CSN
13181	BRH20009	199	3600 CSN
13186	BRH20010	366	3600 CSN
13187	BRH20009	224	3600 CSN
13192	BRH20009	202	3600 CSN
13193	BRH20009	225	3600 CSN

(b) Remove HPT stage 2 disks listed in Table 2 before exceeding 3800 CSN, and replace with serviceable disks.

**Table 2. HPT Stage 2 Disks By Engine SN, Disk P/N, and Disk SN**

Engine Serial Number	Disk P/N	Disk SN
13111	BRH19349	316
13112	BRH19349	318
13114	BRH19349	317
13120	BRH19350	301
13138	BRH19350	334

(c) After effective date of this AD, do not install any HPT stage 1 or stage 2 disks except as allowed by paragraphs (a), (b), or (d) of this AD.

#### **Alternative Methods of Compliance**

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

#### **Special Flight Permits**

(e) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

#### **Effective Date of This AD**

(f) This amendment becomes effective on February 20, 2001 to all owners and operators except those to whom it was made immediately effective by emergency AD 2000-25-51, issued on December 4, 2000, which contained the requirements of this amendment.

**FOR FURTHER INFORMATION CONTACT:** James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7176; fax (781) 238-7199.

Issued in Burlington, Massachusetts on January 24, 2001.

Thomas A. Boudreau, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.